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aiwa SERVICE

# XP-R232 YUC(ST)
# XP-R238 AC(ST)

# SERVICE MANUAL

COMPACT DISC PLAYER BASIC CD MECHANISM : KSM-780 ATA

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” (S/M Code No. 09-022-456-3T1).

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S/M Code No. 09-025-456-3R1

REVISION DATA

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# SPECIFICATIONS

| | |
|---|---|
| **Tracking system** | 3-beam laser |
| **Laser pickup** | Semiconductor laser |
| **D/A conversion** | 8-times oversampling digital filter + 1-bit DAC |
| **Frequency response** | 20 – 20,000 Hz |
| **Output** | PHONES/LINE OUT jack (stereo mini-jack) |
| **Frequency range** | AM: 530/531 kHz – 1,710/1,602 kHz<br>(10 kHz/9 kHz steps)<br>FM: 87.5 – 108 MHz<br>TV: 2 – 13 ch<br>WEATHER: 1 – 7 ch |
| **Maximum output** | 12 mW + 12 mW (16 ohms at 1 kHz)<br>500 mV (47 kohms at 1 kHz) |
| **Power supply** | DC 3 V using two size AA (LR6) alkaline batteries<br>DC 2.4 V using two optional rechargeable batteries<br>(Ni-Cd 1.2 V 700 mAh)<br>AC house current using the optional AC adaptor <XP–R232 only><br>AC house current using the supplied AC adaptor <XP–R238 only> |
| **Maximum outside dimensions** | 132.0 (W) x 26.0 (H) x 145.0 (D) mm<br>($5^1/_4$ x $1^1/_{16}$ x $5^3/_4$ in.)<br>(excluding projecting parts and controls) |
| **Weight** | Approx. 216 g (7.6 oz.) excluding batteries |

**AC adaptor AC-D603 <XP–R238 only>**

Rated voltage: AC 120 V, 60 Hz

• Design and specifications are subject to change without notice.



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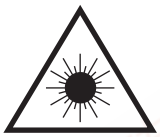
## PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs laser. Therefore, be sure to follow carefully the instructions below when servicing.

**WARNING!!**
WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION. BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.



- Caution: Invisible laser radiation when open and interlocks defeated avoid exposure to beam.
- Advarsel: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

**VAROITUS!**
Laiteen Käyttäminen muulla kuin tässä käyttöohjeessa mainitulla tavalla saataa altistaa käyt-täjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

**VARNING!**
Om apparaten används på annat sätt än vad som specificeras i denna bruksanvising, kan användaren utsättas för osynling laserstrålning, som överskrider gränsen för laserklass 1.

**CAUTION**
Use of controls or adjustments or performance of procedures other than those specified herin may result in hazardous radiation exposure.

**ATTENTION**
L'utillisation de commandes, réglages ou procédures autres que ceux spécifiés peut entraîner une dangereuse exposition aux radiations.

**ADVARSEL**
Usynlig laserstråling ved åbning, når sikkerhedsafbrydereer ude af funktion. Undgå udsættelse for stråling.

This Compact Disc player is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT label is located on the rear exterior.

| | |
|---|---|
| CLASS 1 | LASER PRODUCT |
| KLASSE 1 | LASER PRODUKT |
| LUOKAN 1 | LASER LAITE |
| KLASS 1 | LASER APPARAT |

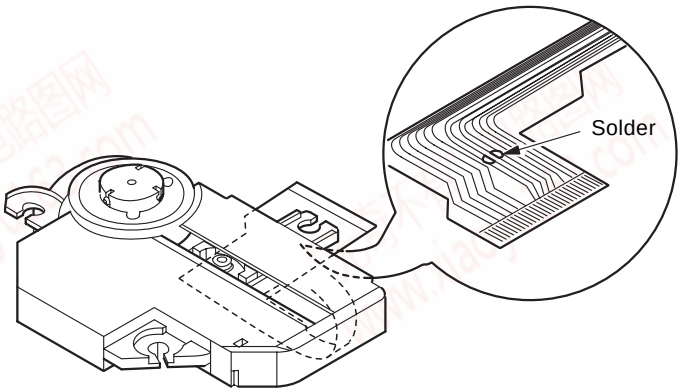
Precaution to replace Optical block

## (KSM – 780 ATA)

Body or clothes electrostatic potential could ruin laser diode in the optical block. Be sure ground body and workbench, and use care the clothes do not touch the diode.

1) After the connection, remove solder shown in the right figure.

CD PICKUP Assy PWB



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# ELECTRICAL PARTS LIST

! = ⚠ SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| FLEX | | O | | 8C-HC5-601-010 | PWB,FLEX CHC-5 | a | b |
| FLEX | | O | LCD0001 | 8C-HC5-620-010 | LCD,CHC-5 REFLEX | a | b |
| FLEX | | X | W 0001 | 87-601-052-210 | WIRE,P1-5-2 | a | b |
| MAIN | | O | BPF0901 | 87-A91-679-010 | FLTR,GTVSB3-C1 | a | b |
| MAIN | | O | C 0101 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0102 | 87-A12-979-010 | CAP,E 100-25 M 7L SRG | a | b |
| MAIN | | O | C 0201 | 87-A12-994-010 | CAP,E 330-6 7L SAX | a | b |
| MAIN | | O | C 0202 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0203 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0204 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0205 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0206 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0207 | 87-A12-995-010 | CAP,E 68-4 5L OSCON | a | b |
| MAIN | | O | C 0208 | 87-A10-488-040 | CAP,E 47-4 7L SR | a | b |
| MAIN | | O | C 0209 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0210 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0211 | 87-010-787-080 | C-CAP,U 0.022-25 K B GRM | a | b |
| MAIN | | O | C 0212 | 87-010-872-080 | C-CAP,U 470P-50 SL | a | b |
| MAIN | | O | C 0213 | 87-A12-158-040 | CAP,E 100-4 M 7L SRA | a | b |
| MAIN | | O | C 0214 | 87-A10-488-040 | CAP,E 47-4 7L SR | a | b |

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | O | C 0216 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0217 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0218 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0219 | 87-A12-158-040 | CAP,E 100-4 M 7L SRA | a | b |
| MAIN | | O | C 0220 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0221 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0222 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0301 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0302 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0303 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0304 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0305 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0306 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0307 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0308 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0309 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0310 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0311 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0312 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0313 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | O | C 0314 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0315 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0316 | 87-012-182-080 | C-CAP,U 27P-50 J CH GRM | a | b |
| MAIN | | O | C 0317 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0318 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0319 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0320 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0321 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0322 | 87-012-191-080 | C-CAP,U 68P-50 J CH | a | b |
| MAIN | | O | C 0323 | 87-012-191-080 | C-CAP,U 68P-50 J CH | a | b |
| MAIN | | O | C 0324 | 87-012-337-080 | C-CAP,U 56P-50 J CH GRM | a | b |
| MAIN | | O | C 0325 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0326 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0327 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0328 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0401 | 87-010-503-040 | CAP,E 220-4 M 5L SRE | a | b |
| MAIN | | O | C 0402 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0403 | 87-010-503-040 | CAP,E 220-4 M 5L SRE | a | b |
| MAIN | | O | C 0404 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0405 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | O | C 0406 | 87-012-271-080 | C-CAP,U 560P-50 K B | a | b |
| MAIN | | O | C 0407 | 87-010-787-080 | C-CAP,U 0.022-25 K B GRM | a | b |
| MAIN | | O | C 0408 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0409 | 87-A10-827-080 | C-CAP,U 0.47-6.3 K B | a | b |
| MAIN | | O | C 0410 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0411 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0412 | 87-016-429-080 | C-CAP,E 100-4 M WX | a | b |
| MAIN | | O | C 0413 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0415 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0416 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0418 | 87-012-180-080 | C-CAP,U 22P-50 J CH | a | b |
| MAIN | | O | C 0419 | 87-012-180-080 | C-CAP,U 22P-50 J CH | a | b |
| MAIN | | O | C 0421 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0422 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0423 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0451 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0452 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0501 | 87-010-502-040 | CAP,E 100-4 M 5L SRE | a | b |
| MAIN | | O | C 0502 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0503 | 87-010-787-080 | C-CAP,U 0.022-25 K B GRM | a | b |



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|---|---|---|---|---|---|---|---|
| MAIN | | O | C 0504 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0505 | 87-012-271-080 | C-CAP,U 560P-50 K B | a | b |
| MAIN | | O | C 0506 | 87-012-193-080 | C-CAP,U 82P-50 J CH | a | b |
| MAIN | | O | C 0507 | 87-012-270-080 | C-CAP,U 470P-50 K B GRM | a | b |
| MAIN | | O | C 0508 | 87-010-501-040 | CAP,E 47-4 M 5L SRE | a | b |
| MAIN | | O | C 0509 | 87-012-279-080 | C-CAP,U 2700P-50 K B GRM | a | b |
| MAIN | | O | C 0510 | 87-012-279-080 | C-CAP,U 2700P-50 K B GRM | a | b |
| MAIN | | O | C 0511 | 87-010-787-080 | C-CAP,U 0.022-25 K B GRM | a | b |
| MAIN | | O | C 0513 | 87-010-787-080 | C-CAP,U 0.022-25 K B GRM | a | b |
| MAIN | | O | C 0514 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0515 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0516 | 87-012-172-080 | C-CAP,U 10P-50 D CH | a | b |
| MAIN | | O | C 0517 | 87-012-184-080 | C-CAP,U 33P-50 J CH GRM | a | b |
| MAIN | | O | C 0518 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0520 | 87-010-501-040 | CAP,E 47-4 M 5L SRE | a | b |
| MAIN | | O | C 0521 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0522 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0523 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0524 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0701 | 87-010-503-040 | CAP,E 220-4 M 5L SRE | a | b |
| MAIN | | O | C 0702 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0703 | 87-012-272-080 | C-CAP,U 680P-50 K B GRM | a | b |
| MAIN | | O | C 0704 | 87-012-272-080 | C-CAP,U 680P-50 K B GRM | a | b |
| MAIN | | O | C 0705 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0706 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0707 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0708 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0709 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0710 | 87-010-501-040 | CAP,E 47-4 M 5L SRE | a | b |
| MAIN | | O | C 0711 | 87-012-172-080 | C-CAP,U 10P-50 D CH | a | b |
| MAIN | | O | C 0712 | 87-012-172-080 | C-CAP,U 10P-50 D CH | a | b |
| MAIN | | O | C 0713 | 87-010-828-080 | C-CAP,U 0.033-16 Z F CM/CB | a | b |
| MAIN | | O | C 0714 | 87-010-828-080 | C-CAP,U 0.033-16 Z F CM/CB | a | b |
| MAIN | | O | C 0715 | 87-012-172-080 | C-CAP,U 10P-50 D CH | a | b |
| MAIN | | O | C 0716 | 87-012-172-080 | C-CAP,U 10P-50 D CH | a | b |
| MAIN | | O | C 0717 | 87-010-503-040 | CAP,E 220-4 M 5L SRE | a | b |
| MAIN | | O | C 0718 | 87-010-503-040 | CAP,E 220-4 M 5L SRE | a | b |
| MAIN | | O | C 0719 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0720 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0801 | 87-012-276-080 | C-CAP,U 1500P-50 K B GRM | a | b |
| MAIN | | O | C 0802 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0803 | 87-012-292-080 | C-CAP,U 270P-50 J UJ GRM | a | b |
| MAIN | | O | C 0804 | 87-012-291-080 | C-CAP,U 220P-50 J UJ GRM | a | b |
| MAIN | | O | C 0805 | 87-012-245-080 | C-CAP,U 15P-50 J UJ | a | b |
| MAIN | | O | C 0806 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0807 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0812 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0813 | 87-010-831-080 | C-CAP,U 0.1-16 Z F | a | b |
| MAIN | | O | C 0821 | 87-A10-047-080 | C-CAP,U 1-10 Z F | a | b |
| MAIN | | O | C 0822 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0823 | 87-010-805-080 | C-CAP,S 1-16 Z F GRM | a | b |
| MAIN | | O | C 0824 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0825 | 87-012-167-080 | C-CAP,U 5P-50 C CH | a | b |
| MAIN | | O | C 0826 | 87-012-337-080 | C-CAP,U 56P-50 J CH GRM | a | b |
| MAIN | | O | C 0827 | 87-012-170-080 | C-CAP,U 8P-50 D CH | a | b |
| MAIN | | O | C 0901 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0902 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0904 | 87-012-336-080 | C-CAP,U 330P-50 J SL | a | b |
| MAIN | | O | C 0906 | 87-A13-063-080 | C-CAP,U 220P-50 J CH (MURATA) | a | b |
| MAIN | | O | C 0907 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0908 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0909 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0910 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0911 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0912 | 87-012-286-080 | C-CAP,U 0.01-25 K B GRM | a | b |
| MAIN | | O | C 0913 | 87-012-286-080 | C-CAP,U 0.01-25 K B GRM | a | b |
| MAIN | | O | C 0917 | 87-012-195-080 | C-CAP,U 100P-50 J CH GRM | a | b |
| MAIN | | O | C 0918 | 87-010-758-080 | C-CAP,U 0.068-25 Z F CM/CB | a | b |
| MAIN | | O | C 0919 | 87-012-273-080 | C-CAP,U 820P-50 K B GRM | a | b |
| MAIN | | O | C 0920 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0921 | 87-010-196-080 | C-CAP,S 0.1-25 Z F C2012 | a | b |
| MAIN | | O | C 0922 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0923 | 87-A13-063-080 | C-CAP,U 220P-50 J CH (MURATA) | a | b |
| MAIN | | O | C 0924 | 87-012-336-080 | C-CAP,U 330P-50 J SL | a | b |
| MAIN | | O | C 0925 | 87-A10-707-080 | C-CAP,U 0.47-10 Z F | a | b |
| MAIN | | O | C 0926 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0927 | 87-A11-049-080 | C-CAP,U 1-6.3 K B | a | b |
| MAIN | | O | C 0928 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0929 | 87-A11-796-080 | C-CAP,S 4.7-10 Z F | a | b |
| MAIN | | O | C 0930 | 87-016-118-080 | C-CAP,U 0.022-25 J B GRM | a | b |



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| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | O | C 0931 | 87-016-118-080 | C-CAP,U 0.022-25 J B GRM | a | b |
| MAIN | | O | C 0932 | 87-A10-707-080 | C-CAP,U 0.47-10 Z F | a | b |
| MAIN | | O | C 0933 | 87-A10-707-080 | C-CAP,U 0.47-10 Z F | a | b |
| MAIN | | O | C 0934 | 87-010-196-080 | C-CAP,S 0.1-25 Z F C2012 | a | b |
| MAIN | | O | C 0935 | 87-012-274-080 | C-CAP,U 1000P-50 K B GRM | a | b |
| MAIN | | O | C 0936 | 87-012-286-080 | C-CAP,U 0.01-25 K B GRM | a | b |
| MAIN | | X | C 0941 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | O | C 0951 | 87-A10-260-080 | C-CAP,U 0.1-16 K B | a | b |
| MAIN | | O | C 0952 | 87-012-195-080 | C-CAP,U 100P-50 J CH GRM | a | b |
| MAIN | | O | C 0953 | 87-012-195-080 | C-CAP,U 100P-50 J CH GRM | a | b |
| MAIN | | O | C 0954 | 86-ZA1-616-080 | C-CAP,U 0.01-50 K B (MUR) | a | b |
| MAIN | | O | C 0955 | 87-A11-062-080 | C-CAP,S 2.2-16 Z F | a | b |
| MAIN | | O | C 0956 | 87-012-176-080 | C-CAP,U 15P-50 J CH | a | b |
| MAIN | | O | C 0957 | 87-012-178-080 | C-CAP,U 18P-50 J CH | a | b |
| MAIN | | O | C 0991 | 87-012-168-080 | C-CAP,U 6P-50 D CH GRM | a | b |
| MAIN | | O | CF 0901 | 87-A91-312-010 | FLTR,SFE10.7MS 2C10-A | a | b |
| MAIN | | O | CF 0902 | 87-A91-162-010 | FLTR,PFS450A7 | a | b |
| MAIN | | O | CF 0903 | 87-A92-372-010 | FLTR,CDA10.7 MG 100A | a | b |
| MAIN | | O | CN 0301 | 87-A60-790-080 | C-CONN,28P V 28FLT-SM1TB | a | b |
| MAIN | | O | CN 0501 | 87-A61-857-080 | C-CONN,16P H 52271 | a | b |
| MAIN | | O | CN 0601 | 87-099-522-080 | C-CONN,6P V ZH-SM3 | a | b |
| MAIN | | S | D 0101 | 87-A41-128-040 | C-DIODE,MC2850 | a | b |
| MAIN | | S | D 0102 | 87-A40-554-040 | C-DIODE,RB491D | a | b |
| MAIN | | S | D 0201 | 87-A40-196-080 | C-ZENER,UDZ6.2B | a | b |
| MAIN | | S | D 0301 | 87-A40-395-080 | C-ZENER,UDZ2.2B | a | b |
| MAIN | | S | D 0406 | 87-A41-127-040 | C-DIODE,MC2848 | a | b |
| MAIN | | O | D 0801 | 87-A41-065-040 | C-VARI-CAP,SVC347 | a | b |
| MAIN | | O | D 0901 | 87-A40-913-040 | C-VARI-CAP,HVC300B-TRU | a | b |
| MAIN | | O | D 0902 | 87-A40-913-040 | C-VARI-CAP,HVC300B-TRU | a | b |
| MAIN | | S | D 0903 | 87-A40-912-040 | C-DIODE,HSC277B-TRF | a | b |
| MAIN | | S | D 0904 | 87-A40-912-040 | C-DIODE,HSC277B-TRF | a | b |
| MAIN | | O | FB 0701 | 87-A50-715-080 | C-COIL,BLM18B601 | a | b |
| MAIN | | O | FB 0702 | 87-A50-715-080 | C-COIL,BLM18B601 | a | b |
| MAIN | | O | FB 0703 | 87-A50-715-080 | C-COIL,BLM18B601 | a | b |
| MAIN | | O | FB 0704 | 87-A50-715-080 | C-COIL,BLM18B601 | a | b |
| MAIN | | S | IC 0201 | 87-A22-162-030 | C-IC,BH6570KV | a | b |
| MAIN | | S | IC 0301 | 8C-HC5-605-030 | C-IC,MN101C54AAA | a | b |
| MAIN | | S | IC 0302 | 87-A22-181-040 | C-IC,PST3818UL | a | b |
| MAIN | | S | IC 0303 | 87-A22-271-040 | C-IC,TK71518AS | a | b |
| MAIN | | S | IC 0304 | 87-A22-252-040 | C-IC,BR93LL46FV | a | b |
| MAIN | | S | IC 0401 | 87-A22-226-030 | C-IC,MN662786SBM | a | b |
| MAIN | | S | IC 0451 | 87-A21-526-010 | C-IC,GM71VLS17403CLT-1 | a | b |
| MAIN | | S | IC 0501 | 87-A21-873-040 | C-IC,AN8399SA | a | b |
| MAIN | | S | IC 0701 | 87-A22-163-040 | C-IC,NJM2772V | a | b |
| MAIN | | S | IC 0821 | 87-A20-904-080 | C-IC,TK11823MTL | a | b |
| MAIN | | S | IC 0901 | 87-A22-270-040 | C-IC,TA2149BFN | a | b |
| MAIN | | S | IC 0951 | 87-A21-896-040 | C-IC,LC72122V | a | b |
| MAIN | | O | J 0101 | 87-A61-340-010 | JACK,DC | a | b |
| MAIN | | O | J 0701 | 87-A61-339-010 | JACK,3.5 GRN ST W/O SW | a | b |
| MAIN | | O | JR 0901 | 87-A50-597-080 | C-COIL,S 10UH LQG21F100N | a | b |
| MAIN | | O | L 0201 | 87-A50-759-080 | C-COIL,330UH-LB2518 | a | b |
| MAIN | | O | L 0202 | 87-A50-769-010 | COIL,100UH-SBCP 47HYB02 | a | b |
| MAIN | | O | L 0203 | 87-A50-759-080 | C-COIL,330UH-LB2518 | a | b |
| MAIN | | O | L 0204 | 87-A50-758-080 | C-COIL,100UH-LB2518 | a | b |
| MAIN | | O | L 0205 | 87-A50-758-080 | C-COIL,100UH-LB2518 | a | b |
| MAIN | | O | L 0401 | 87-A50-758-080 | C-COIL,100UH-LB2518 | a | b |
| MAIN | | O | L 0402 | 87-A50-758-080 | C-COIL,100UH-LB2518 | a | b |
| MAIN | | O | L 0501 | 87-A50-759-080 | C-COIL,330UH-LB2518 | a | b |
| MAIN | | O | L 0502 | 87-A50-759-080 | C-COIL,330UH-LB2518 | a | b |
| MAIN | | O | L 0801 | 8C-HC5-625-010 | ANT,BAR-ANTENNA CHC-5 | a | b |
| MAIN | | O | L 0802 | 87-003-247-080 | C-COIL, 100UH J LQH3 | a | b |
| MAIN | | O | L 0821 | 87-A50-037-080 | C-COIL,D-D 5CDLU 796KHZ | a | b |
| MAIN | | O | L 0951 | 8C-HC5-610-010 | COIL,TV RF-L-EX | a | b |
| MAIN | | O | L 0952 | 8C-HC5-611-010 | COIL,TV OSC-L-EX | a | b |
| MAIN | | O | L 0953 | 87-005-788-080 | C-IFT AM 5M 5CLD | a | b |
| MAIN | | O | L 0954 | 8C-HC5-612-010 | COIL,TV RF-H-EX | a | b |
| MAIN | | O | L 0955 | 8C-HC5-613-010 | COIL,TV OSC-H-EX | a | b |
| MAIN | | S | Q 0101 | 87-A30-681-040 | C-TR,2SC4154 | a | b |
| MAIN | | S | Q 0104 | 87-A30-679-040 | C-TR,2SC5810 | a | b |
| MAIN | | S | Q 0201 | 87-A30-678-040 | C-TR,2SA2070 | a | b |
| MAIN | | S | Q 0202 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0203 | 87-A30-385-040 | C-TR,DTA114YUA | a | b |
| MAIN | | S | Q 0204 | 87-A30-681-040 | C-TR,2SC4154 | a | b |
| MAIN | | S | Q 0205 | 87-A30-681-040 | C-TR,2SC4154 | a | b |
| MAIN | | S | Q 0207 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0208 | 87-A30-144-040 | C-TR,2SC4081 | a | b |
| MAIN | | S | Q 0209 | 87-A30-144-040 | C-TR,2SC4081 | a | b |
| MAIN | | S | Q 0210 | 87-A30-144-040 | C-TR,2SC4081 | a | b |
| MAIN | | S | Q 0301 | 87-026-263-080 | C-TR,RN1410 | a | b |
| MAIN | | S | Q 0302 | 87-A30-682-040 | C-TR,2SA2018 | a | b |



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| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | S | Q 0303 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0304 | 87-026-263-080 | C-TR,RN1410 | a | b |
| MAIN | | S | Q 0306 | 87-A30-405-040 | C-TR,DTC114TUA | a | b |
| MAIN | | S | Q 0310 | 87-A30-405-040 | C-TR,DTC114TUA | a | b |
| MAIN | | S | Q 0501 | 87-A30-405-040 | C-TR,DTC114TUA | a | b |
| MAIN | | S | Q 0504 | 87-A30-386-040 | C-TR,DTA114TUA | a | b |
| MAIN | | S | Q 0510 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0702 | 87-A30-328-040 | C-TR,IMX9 | a | b |
| MAIN | | S | Q 0704 | 87-A30-405-040 | C-TR,DTC114TUA | a | b |
| MAIN | | S | Q 0705 | 87-A30-405-040 | C-TR,DTC114TUA | a | b |
| MAIN | | S | Q 0801 | 89-503-602-080 | C-FET,2SK360E | a | b |
| MAIN | | S | Q 0811 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0901 | 87-A30-385-040 | C-TR,DTA114YUA | a | b |
| MAIN | | S | Q 0902 | 87-A30-385-040 | C-TR,DTA114YUA | a | b |
| MAIN | | S | Q 0903 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0904 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0905 | 87-A30-682-040 | C-TR,2SA2018 | a | b |
| MAIN | | S | Q 0906 | 87-A30-404-040 | C-TR,DTC114YUA | a | b |
| MAIN | | S | Q 0907 | 87-A30-404-040 | C-TR,DTC114YUA | a | b |
| MAIN | | S | Q 0908 | 87-A30-404-040 | C-TR,DTC114YUA | a | b |
| MAIN | | S | Q 0909 | 87-A30-188-040 | C-TR,2SC4915O | a | b |
| MAIN | | X | R 0101 | 88-108-182-080 | C-RES,U 1.8K-1/16W J | a | b |
| MAIN | | X | R 0102 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0103 | 88-128-689-080 | C-RES, 6.8-1/8W J | a | b |
| MAIN | | X | R 0105 | 88-138-399-080 | C-RES, 3.9-1/4W J | a | b |
| MAIN | | X | R 0106 | 88-108-561-080 | C-RES,U 560-1/16W J | a | b |
| MAIN | | X | R 0202 | 88-108-100-080 | C-RES,U 10-1/16W J | a | b |
| MAIN | | X | R 0203 | 88-108-220-080 | C-RES,U 22-1/16W J | a | b |
| MAIN | | X | R 0206 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0207 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0208 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0209 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0210 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0211 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0212 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0214 | 88-108-470-080 | C-RES,U 47-1/16W J | a | b |
| MAIN | | X | R 0215 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0216 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0217 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0218 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0219 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0220 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0221 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0222 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0223 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0301 | 88-108-274-080 | C-RES,U 270K-1/16W J | a | b |
| MAIN | | X | R 0302 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0303 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0304 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0305 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0306 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0307 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0308 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0309 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0313 | 88-108-101-080 | C-RES,U 100-1/16W J | a | b |
| MAIN | | X | R 0314 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0315 | 88-108-274-080 | C-RES,U 270K-1/16W J | a | b |
| MAIN | | X | R 0316 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0317 | 88-108-273-080 | C-RES,U 27K-1/16W J | a | b |
| MAIN | | X | R 0319 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0320 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0321 | 88-108-123-080 | C-RES,U 12K-1/16W J | a | b |
| MAIN | | X | R 0322 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0324 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0325 | 88-108-155-080 | C-RES,U 1.5M-1/16W J | a | b |
| MAIN | | X | R 0326 | 88-108-155-080 | C-RES,U 1.5M-1/16W J | a | b |
| MAIN | | X | R 0327 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0328 | 88-108-474-080 | C-RES,U 470K-1/16W J | a | b |
| MAIN | | X | R 0329 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0330 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0331 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0332 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0333 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0334 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0335 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0336 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0338 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0370 | 88-108-274-080 | C-RES,U 270K-1/16W J | a | b |
| MAIN | | X | R 0371 | 88-108-124-080 | C-RES,U 120K-1/16W J | a | b |
| MAIN | | X | R 0372 | 88-108-124-080 | C-RES,U 120K-1/16W J | a | b |



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|---|---|---|---|---|---|---|---|
| MAIN | | X | R 0373 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0401 | 88-108-563-080 | C-RES,U 56K-1/16W J | a | b |
| MAIN | | X | R 0402 | 88-108-683-080 | C-RES,U 68K-1/16W J | a | b |
| MAIN | | X | R 0403 | 88-108-222-080 | C-RES,U 2.2K-1/16W J | a | b |
| MAIN | | X | R 0404 | 88-108-151-080 | C-RES,U 150-1/16W J | a | b |
| MAIN | | X | R 0405 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0406 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0412 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0413 | 88-108-470-080 | C-RES,U 47-1/16W J | a | b |
| MAIN | | X | R 0415 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0416 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0451 | 88-108-100-080 | C-RES,U 10-1/16W J | a | b |
| MAIN | | X | R 0501 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0502 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0503 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0504 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0505 | 88-108-822-080 | C-RES,U 8.2K-1/16W J | a | b |
| MAIN | | X | R 0506 | 88-108-822-080 | C-RES,U 8.2K-1/16W J | a | b |
| MAIN | | X | R 0507 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0508 | 88-108-223-080 | C-RES,U 22K-1/16W J | a | b |

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|---|---|---|---|---|---|---|---|
| MAIN | | X | R 0509 | 88-108-333-080 | C-RES,U 33K-1/16W J | a | b |
| MAIN | | X | R 0510 | 88-108-124-080 | C-RES,U 120K-1/16W J | a | b |
| MAIN | | X | R 0511 | 88-108-223-080 | C-RES,U 22K-1/16W J | a | b |
| MAIN | | X | R 0512 | 88-108-822-080 | C-RES,U 8.2K-1/16W J | a | b |
| MAIN | | X | R 0513 | 88-108-222-080 | C-RES,U 2.2K-1/16W J | a | b |
| MAIN | | X | R 0514 | 88-108-182-080 | C-RES,U 1.8K-1/16W J | a | b |
| MAIN | | X | R 0515 | 88-108-100-080 | C-RES,U 10-1/16W J | a | b |
| MAIN | | X | R 0516 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0523 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0701 | 88-108-689-080 | C-RES,U 6.8-1/16W J | a | b |
| MAIN | | X | R 0702 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0703 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0704 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0705 | 88-108-273-080 | C-RES,U 27K-1/16W J | a | b |
| MAIN | | X | R 0706 | 88-108-273-080 | C-RES,U 27K-1/16W J | a | b |
| MAIN | | X | R 0707 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0708 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0709 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0710 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0711 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | X | R 0712 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0713 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0714 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0718 | 88-108-682-080 | C-RES,U 6.8K-1/16W J | a | b |
| MAIN | | X | R 0719 | 88-108-682-080 | C-RES,U 6.8K-1/16W J | a | b |
| MAIN | | X | R 0722 | 88-108-682-080 | C-RES,U 6.8K-1/16W J | a | b |
| MAIN | | X | R 0723 | 88-108-682-080 | C-RES,U 6.8K-1/16W J | a | b |
| MAIN | | X | R 0724 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0725 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0726 | 88-108-224-080 | C-RES,U 220K-1/16W J | a | b |
| MAIN | | X | R 0727 | 88-108-224-080 | C-RES,U 220K-1/16W J | a | b |
| MAIN | | X | R 0728 | 88-108-682-080 | C-RES,U 6.8K-1/16W J | a | b |
| MAIN | | X | R 0729 | 88-108-682-080 | C-RES,U 6.8K-1/16W J | a | b |
| MAIN | | X | R 0730 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0790 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0791 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0801 | 88-108-470-080 | C-RES,U 47-1/16W J | a | b |
| MAIN | | X | R 0802 | 88-108-221-080 | C-RES,U 220-1/16W J | a | b |
| MAIN | | X | R 0804 | 88-108-223-080 | C-RES,U 22K-1/16W J | a | b |
| MAIN | | X | R 0811 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0812 | 88-108-472-080 | C-RES,U 4.7K-1/16W J | a | b |
| MAIN | | X | R 0821 | 88-108-220-080 | C-RES,U 22-1/16W J | a | b |
| MAIN | | X | R 0901 | 88-108-222-080 | C-RES,U 2.2K-1/16W J | a | b |
| MAIN | | X | R 0902 | 88-108-222-080 | C-RES,U 2.2K-1/16W J | a | b |
| MAIN | | X | R 0903 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0904 | 88-108-100-080 | C-RES,U 10-1/16W J | a | b |
| MAIN | | X | R 0905 | 88-108-000-080 | C-JUMPER,U | a | b |
| MAIN | | X | R 0906 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0907 | 88-108-472-080 | C-RES,U 4.7K-1/16W J | a | b |
| MAIN | | X | R 0908 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0909 | 88-108-471-080 | C-RES,U 470-1/16W J | a | b |
| MAIN | | X | R 0910 | 88-108-221-080 | C-RES,U 220-1/16W J | a | b |
| MAIN | | X | R 0911 | 88-108-222-080 | C-RES,U 2.2K-1/16W J | a | b |
| MAIN | | X | R 0912 | 88-108-122-080 | C-RES,U 1.2K-1/16W J | a | b |
| MAIN | | X | R 0913 | 88-108-222-080 | C-RES,U 2.2K-1/16W J | a | b |
| MAIN | | X | R 0914 | 88-108-104-080 | C-RES,U 100K-1/16W J | a | b |
| MAIN | | X | R 0915 | 88-108-222-080 | C-RES,U 2.2K-1/16W J | a | b |
| MAIN | | X | R 0916 | 88-108-332-080 | C-RES,U 3.3K-1/16W J | a | b |
| MAIN | | X | R 0917 | 88-108-221-080 | C-RES,U 220-1/16W J | a | b |
| MAIN | | X | R 0918 | 88-108-221-080 | C-RES,U 220-1/16W J | a | b |



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! = ⚠ SAFTY PARTS
C = Components marked
All components used on this model at the production line are shown in this service manual.
However, please note that not all components will be available as spare parts for after-sales service.
Components marked S and O are designated as spare parts for service and will be stocked at the spare parts centers.
Components marked X and R are not designated as spare parts for after sales service, and will not be stocked at the spare parts centers.

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | X | R 0921 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | X | R 0922 | 88-108-474-080 | C-RES,U 470K-1/16W J | a | b |
| MAIN | | X | R 0923 | 88-108-221-080 | C-RES,U 220-1/16W J | a | b |
| MAIN | | X | R 0925 | 88-108-474-080 | C-RES,U 470K-1/16W J | a | b |
| MAIN | | X | R 0926 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0927 | 88-108-221-080 | C-RES,U 220-1/16W J | a | b |
| MAIN | | X | R 0951 | 88-108-473-080 | C-RES,U 47K-1/16W J | a | b |
| MAIN | | X | R 0952 | 88-108-472-080 | C-RES,U 4.7K-1/16W J | a | b |
| MAIN | | X | R 0953 | 88-108-681-080 | C-RES,U 680-1/16W J | a | b |
| MAIN | | X | R 0955 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0956 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0957 | 88-108-102-080 | C-RES,U 1K-1/16W J | a | b |
| MAIN | | X | R 0958 | 88-108-221-080 | C-RES,U 220-1/16W J | a | b |
| MAIN | | X | R 0959 | 88-108-103-080 | C-RES,U 10K-1/16W J | a | b |
| MAIN | | O | S 0301 | 87-A92-085-010 | SW,MICRO ESE11SV1 | a | b |
| MAIN | | O | S 0302 | 87-A91-457-380 | C-SW,SL 1-1-3 SS-350-A13B-C-T | a | b |
| MAIN | | O | TC 0801 | 87-011-249-080 | C-TRIMMER,CER 30P 4.5X3.2 ECRK | a | b |
| MAIN | | O | VR 0701 | 87-A92-340-010 | VR,RTRY 30KX2 H XV0107 | a | b |
| MAIN | | O | X 0301 | 87-A70-377-010 | VIB,4.19MHZ CSA4.19MG200 | a | b |
| MAIN | | O | X 0401 | 87-A70-202-080 | C-VIB,CER 16.93MHZ CSACV-MXJ04 | a | b |

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| MAIN | | O | X 0951 | 87-A70-082-110 | VIB,XTAL 75KHZ | a | b |



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○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding

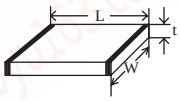
88 – □□□ □□□

A
抵抗部品コード
Resistor Code

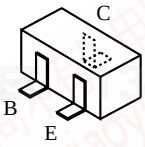
桁表示
Figure

抵抗値
Value of resistor

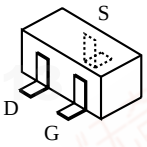
チップ抵抗
Chip resistor

| 容量 Wattage | 種類 Type | 許容誤差 Tolerance | 記号 Symbol | 寸法／Dimensions (mm) 外形／Form | L | W | t | 抵抗コード ：A Resistor Code：A |
|---|---|---|---|---|---|---|---|---|
| 1/16W | 1005 | ±5% | CJ |  | 1.0 | 0.5 | 0.35 | 104 |
| 1/16W | 1608 | ±5% | CJ | | 1.6 | 0.8 | 0.45 | 108 |
| 1/10W | 2125 | ±5% | CJ | | 2 | 1.25 | 0.45 | 118 |
| 1/8W | 3216 | ±5% | CJ | | 3.2 | 1.6 | 0.55 | 128 |

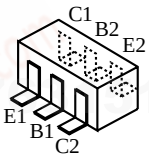
## TRANSISTOR ILLUSTRATION



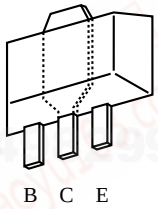

2SA2018
2SC4081
2SC4154
2SC4915O
DTA114TUA
DTA114YUA
DTC114TUA
DTC114YUA
RN1410




2SK360E




IMX9




2SA2070
2SC5810



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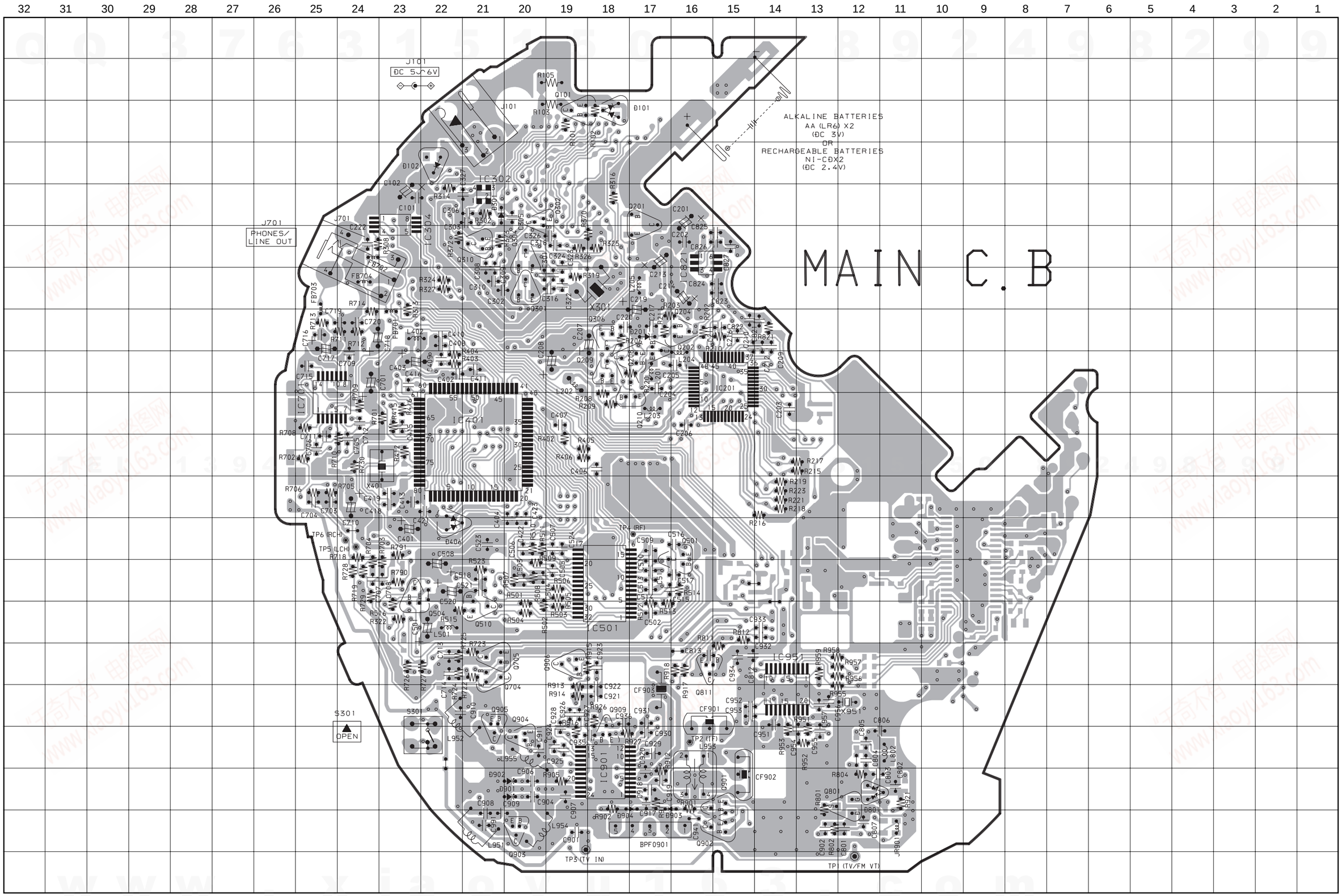
WIRING – 1 (MAIN) <1 / 2>



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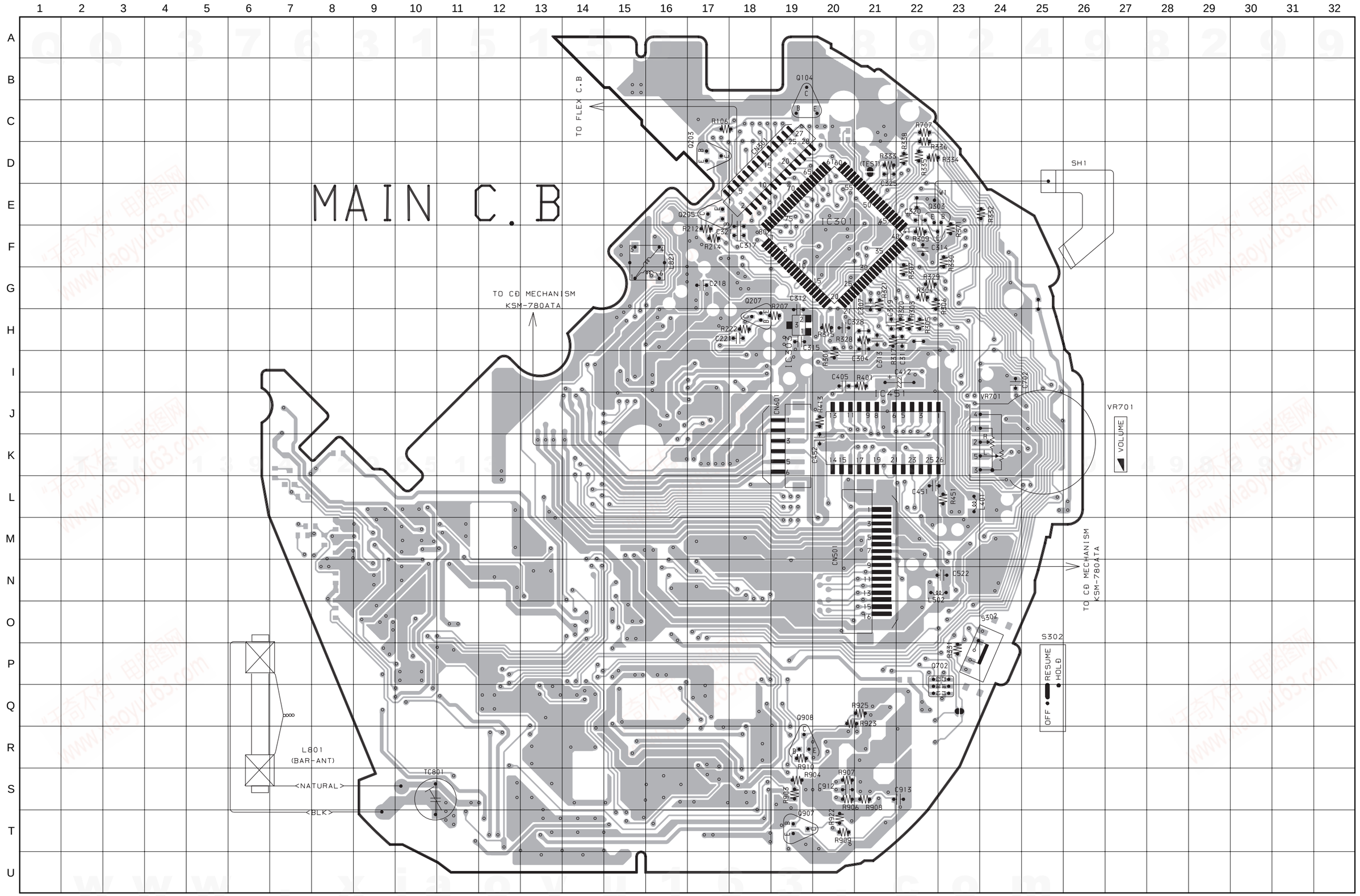
WIRING – 1 (MAIN) <2 / 2>



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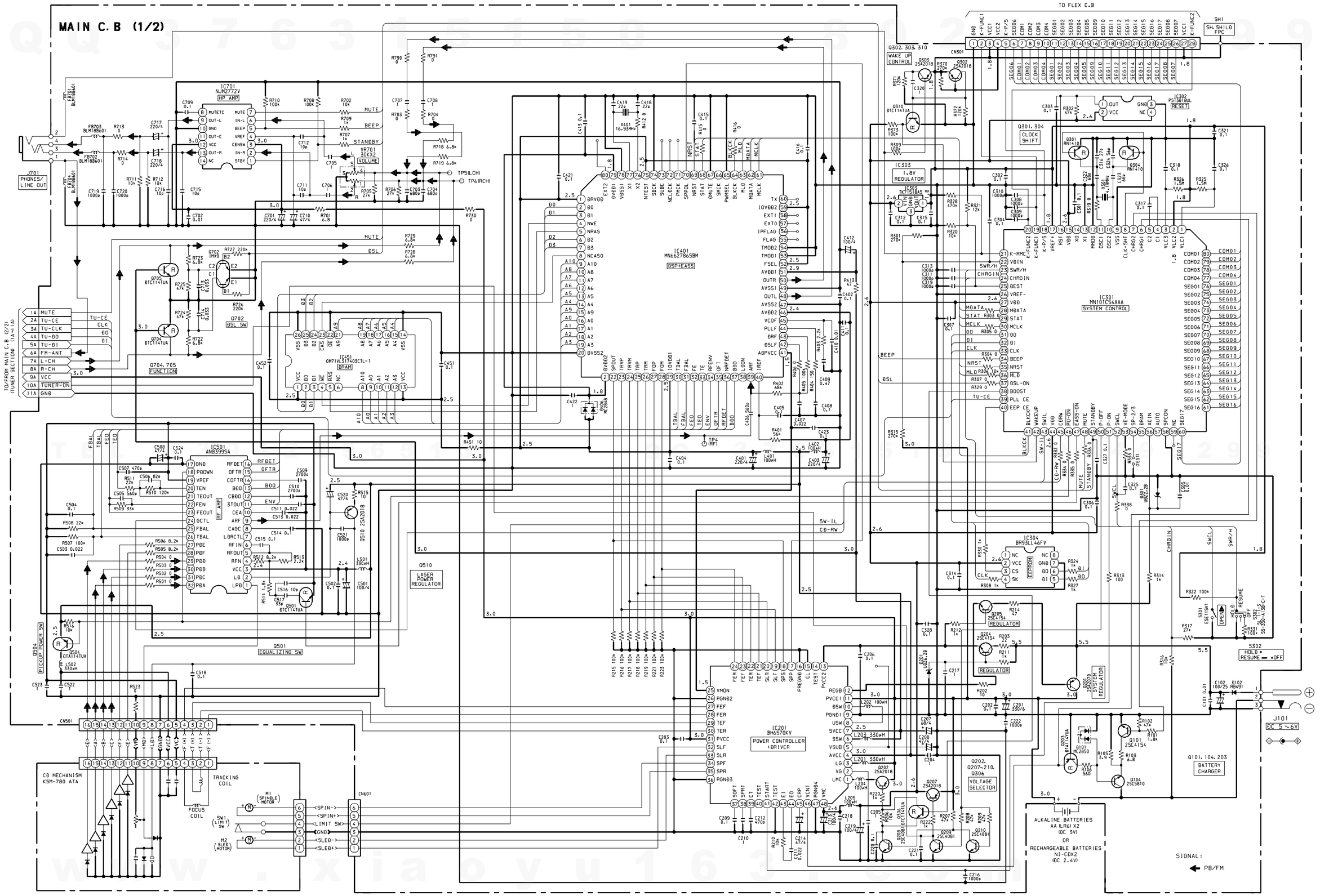
SCHEMATIC DIAGRAM – 1 (MAIN : 1 / 2)



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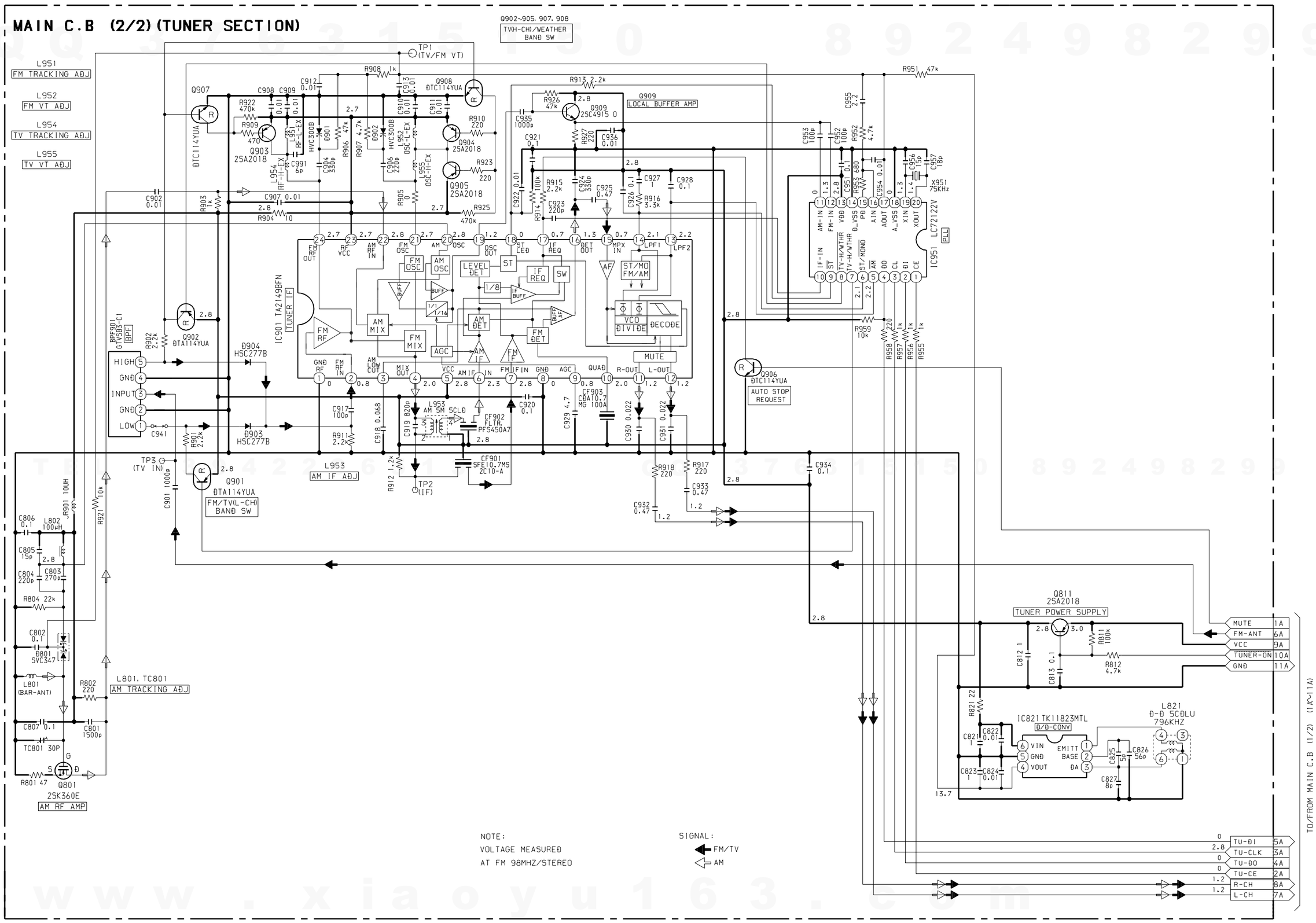
SCHEMATIC DIAGRAM – 2 (MAIN : 2 / 2 <TUNER SECTION>)



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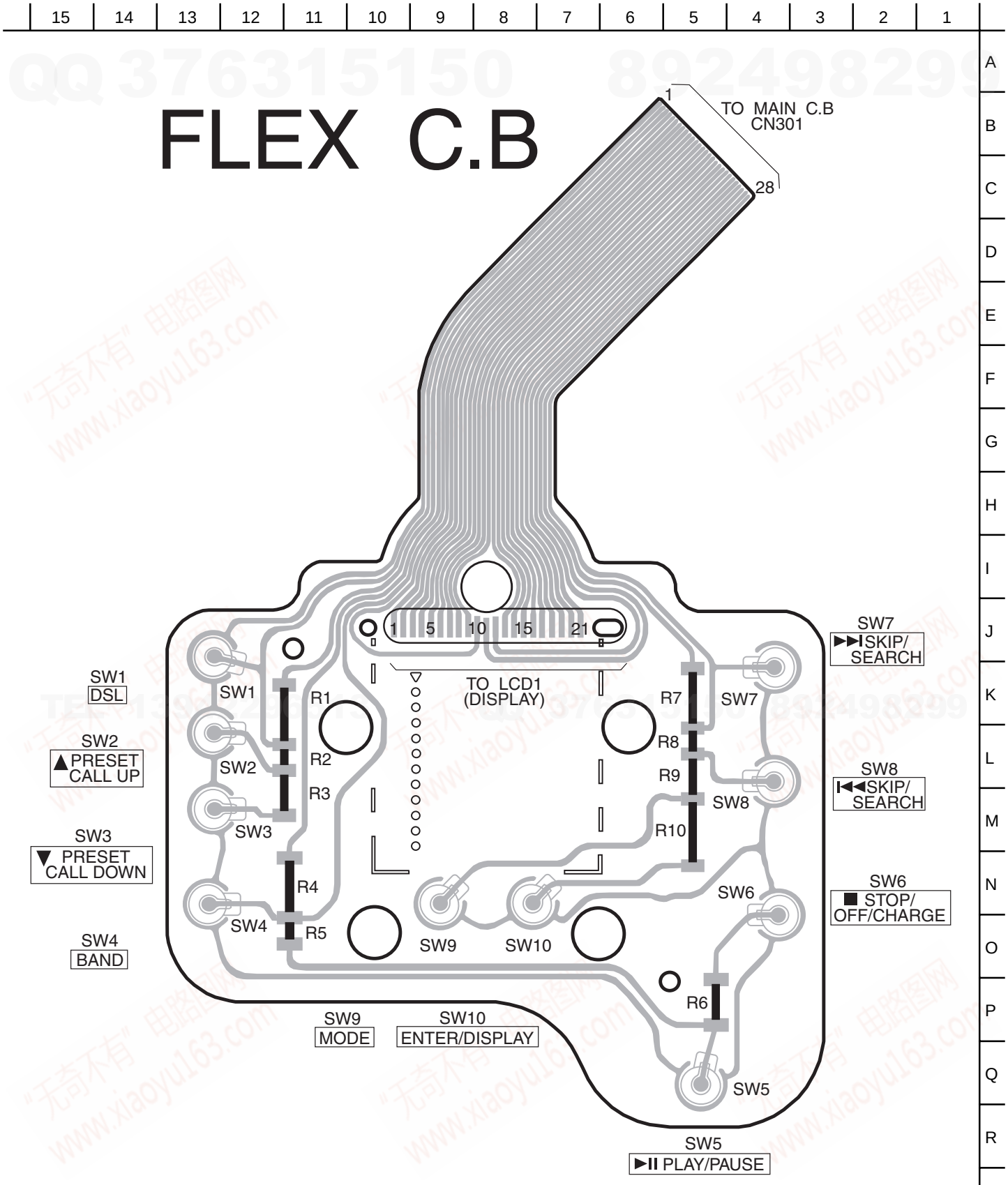




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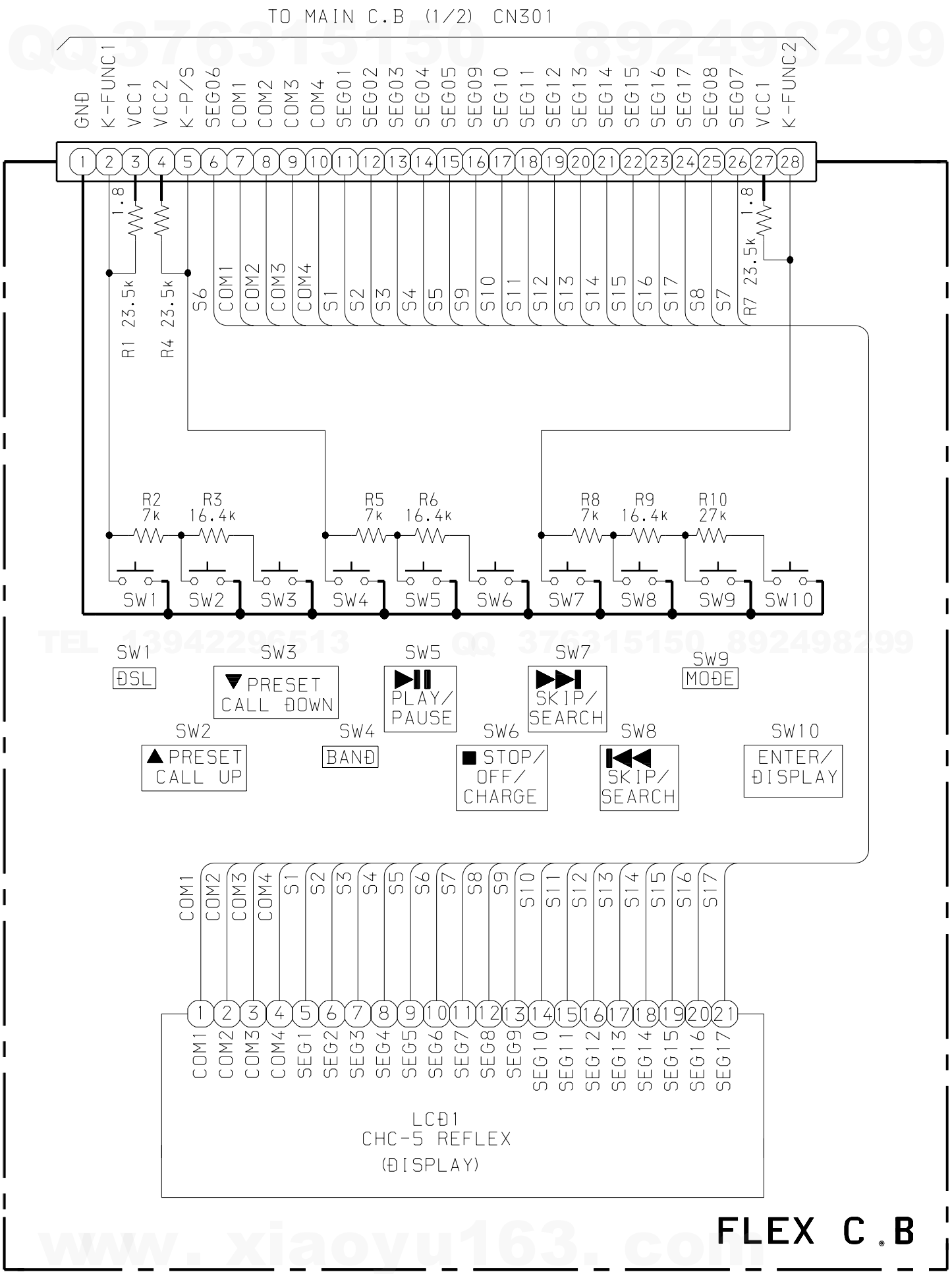
SCHEMATIC DIAGRAM – 3 (FLEX)


TO MAIN C.B (1/2) CN301
GND K-FUNC1 VCC1 VCC2 K-P/S SEG06 COM1 COM2 COM3 COM4 SEG01 SEG02 SEG03 SEG04 SEG05 SEG09 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16 SEG17 SEG08 SEG07 VCC1 K-FUNC2
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
1.8
R1 23.5k
R4 23.5k
S6 COM1 COM2 COM3 COM4 S1 S2 S3 S4 S5 S9 S10 S11 S12 S13 S14 S15 S16 S17 S8 S7
R7 23.5k
1.8
R2 7k
R3 16.4k
R5 7k
R6 16.4k
R8 7k
R9 16.4k
R10 27k
SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8 SW9 SW10
SW1 ĐSL
SW3 PRESET CALL ĐOWN
SW5 PLAY/ PAUSE
SW7 SKIP/ SEARCH
SW9 MOĐE
SW2 PRESET CALL UP
SW4 BANĐ
SW6 STOP/ OFF/ CHARGE
SW8 SKIP/ SEARCH
SW10 ENTER/ ĐISPLAY
COM1 COM2 COM3 COM4 S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S11 S12 S13 S14 S15 S16 S17
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
COM1 COM2 COM3 COM4 SEG1 SEG2 SEG3 SEG4 SEG5 SEG6 SEG7 SEG8 SEG9 SEG10 SEG11 SEG12 SEG13 SEG14 SEG15 SEG16 SEG17
LCĐ1
CHC-5 REFLEX
(ĐISPLAY)
FLEX C.B



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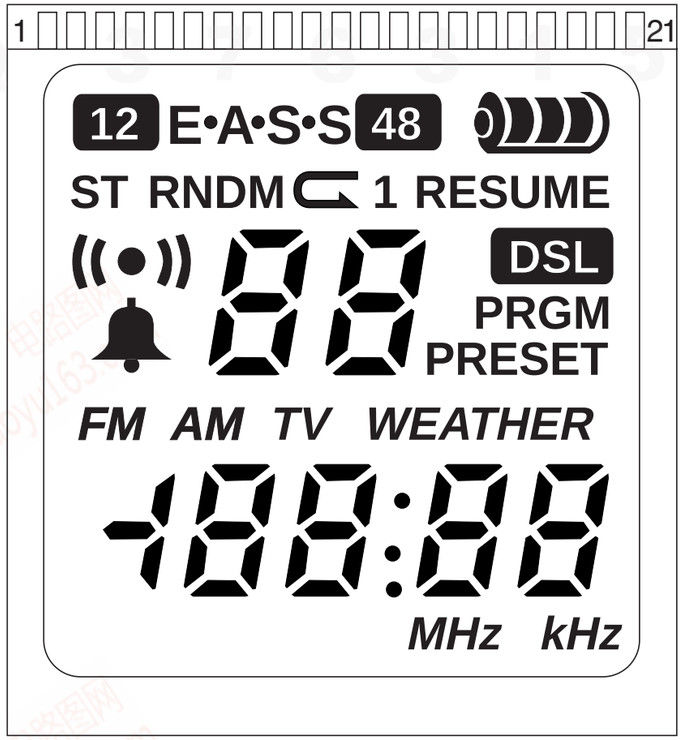
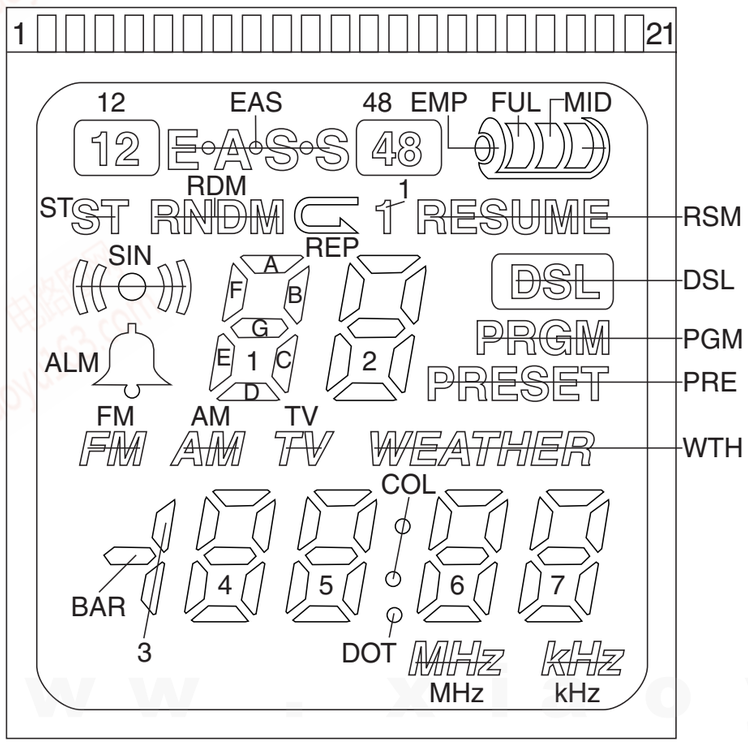
LCD DIAGRAM




| PIN NO. | | COM1 | COM2 | COM3 | COM4 |
|---|---|---|---|---|---|
| 1 | – – – | COM1 | – – – | – – – | – – – |
| 2 | – – – | – – – | COM2 | – – – | – – – |
| 3 | – – – | – – – | – – – | COM3 | – – – |
| 4 | – – – | – – – | – – – | – – – | COM4 |
| 5 | SEG1 | ALM | SIN | ST | RDM |
| 6 | SEG2 | 1D | 1E | 1F | REP |
| 7 | SEG3 | 1C | 1G | 1B | 1A |
| 8 | SEG4 | 2D | 2E | 2F | RSM |
| 9 | SEG5 | 2C | 2G | 2B | 2A |
| 10 | SEG6 | 1 | 12 | EAS | 48 |
| 11 | SEG7 | DSL | MID | FUL | EMP |
| 12 | SEG8 | TV | WTH | PRE | PGM |
| 13 | SEG9 | BAR | 3 | FM | AM |
| 14 | SEG10 | 7D | 7E | 7F | kHz |
| 15 | SEG11 | 7C | 7G | 7B | 7A |
| 16 | SEG12 | 6D | 6E | 6F | MHz |
| 17 | SEF13 | 6C | 6G | 6B | 6A |
| 18 | SEG14 | 5D | 5E | 5F | COL |
| 19 | SEG15 | 5C | 5G | 5B | 5A |
| 20 | SEG16 | 4D | 4E | 4F | DOT |
| 21 | SEG17 | 4C | 4G | 4B | 4A |



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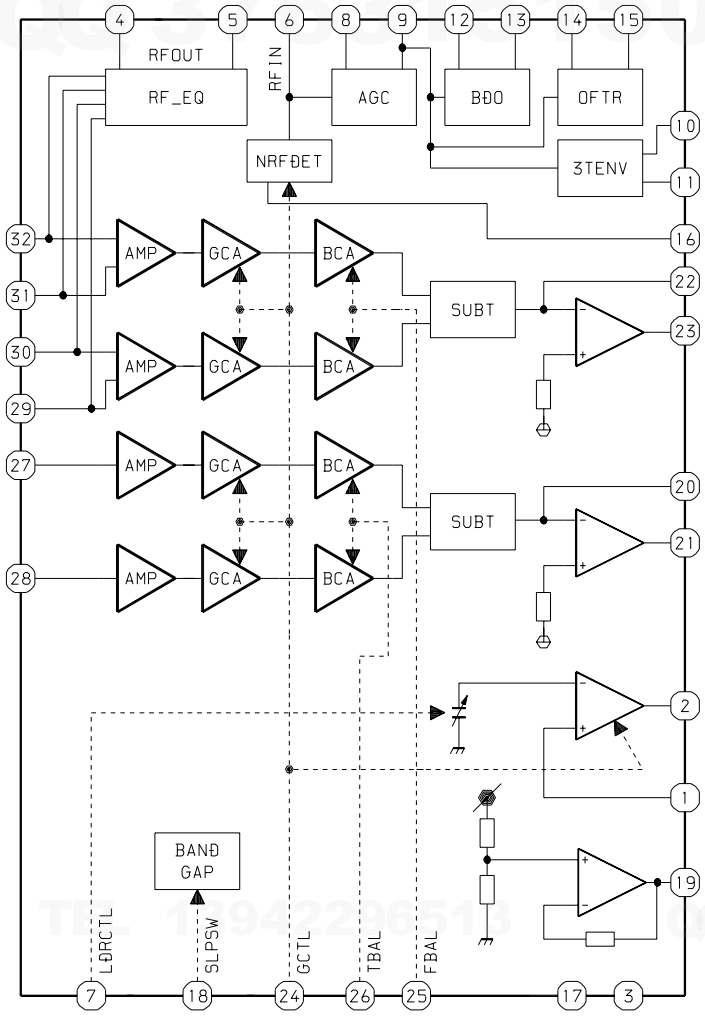
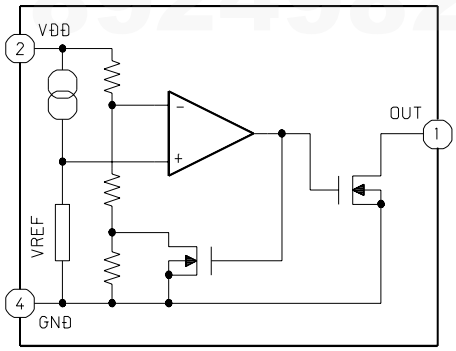
# IC BLOCK DIAGRAM

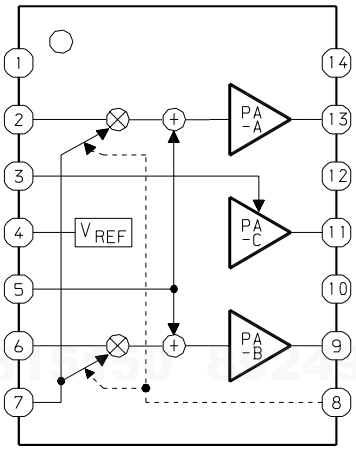
IC, AN8399SA



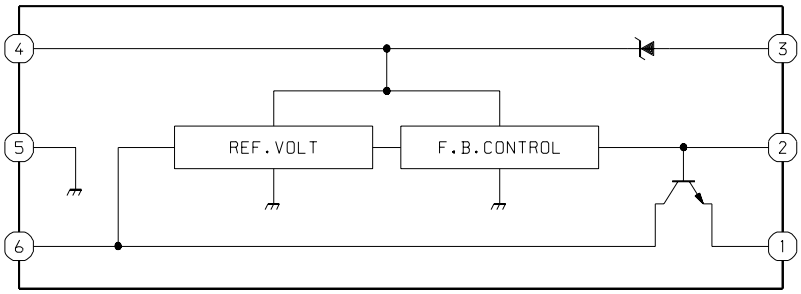

IC, PST3818UL




IC, NJM2772V




IC, TK11823MTL



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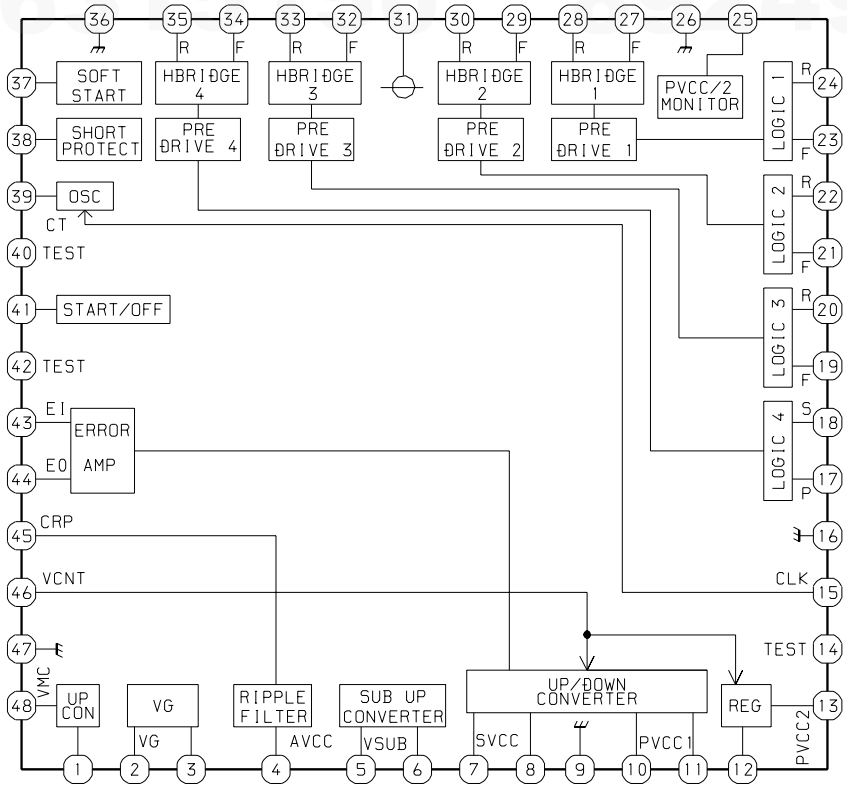
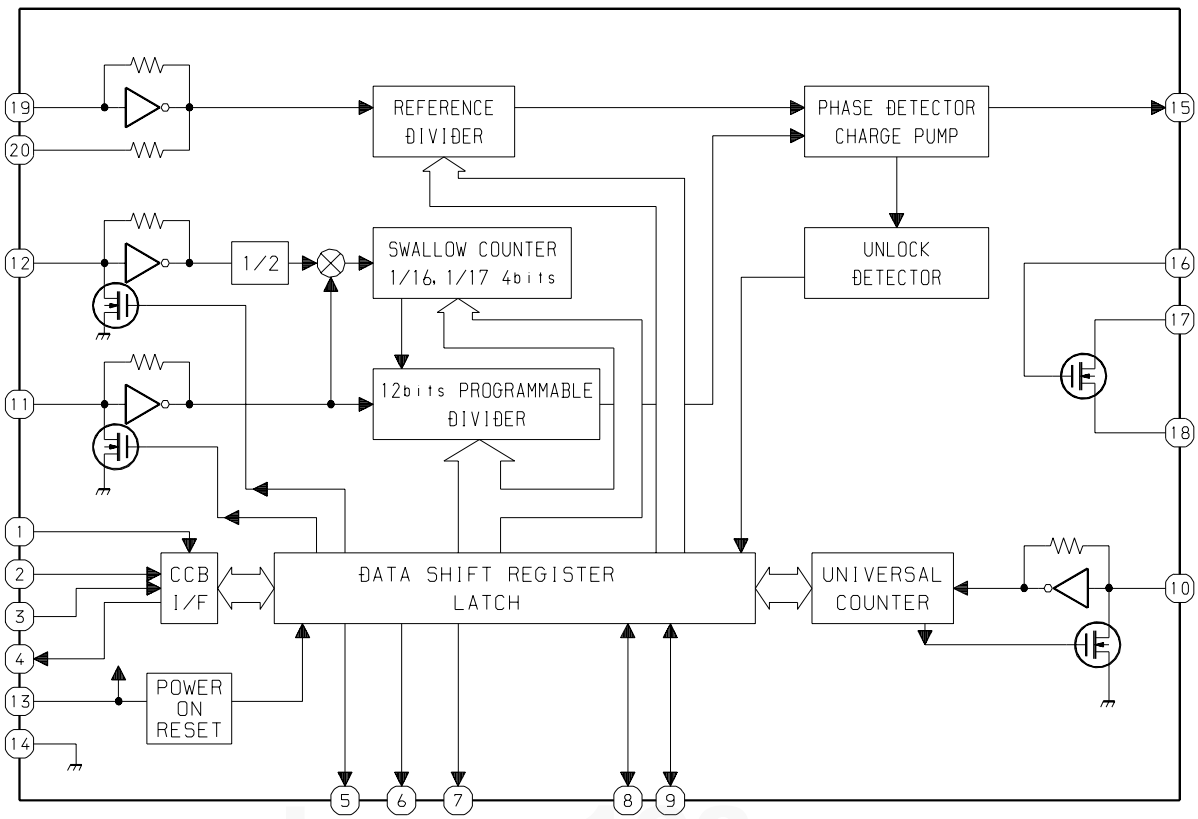
IC, BH6570KV




IC, LC72122V



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## IC DESCRIPTION

IC, MN101C54AAA

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | VLC1 | – | LCD drive voltage setting terminal. |
| 2 | VLC2 | – | LCD drive voltage setting terminal. |
| 3 | VLC3 | – | LCD drive voltage setting terminal. |
| 4 | C1 | – | Connected to capacitor. |
| 5 | C2 | – | Connected to capacitor. |
| 6 | CHRG1 | O | Main charge output. |
| 7 | CHRG2 | O | Sub charge output. |
| 8 | CLK-SHT | O | Clock shift output. "H": Shift. |
| 9 | VSS | – | Connected to GND. |
| 10 | OSC2 | O | Micon main clock oscillator output. (4.19MHz) |
| 11 | OSC1 | O | Micon main clock oscillator output. (4.19MHz) |
| 12 | MMOD | – | Processor mode unused. (Connected to GND) |
| 13 | XI | I | Sub clock oscillator. (Connected to GND) |
| 14 | XO | O | Sub clock oscillator. (Not used) |
| 15 | VDD | – | Connected to VDD. |
| 16 | RST | I | Micon reset input. |
| 17 | VREF+ | – | A/D convertor VDD (1.8V). |
| 18 | K-P/S | I | "PLAY", "STOP" and "BAND" key input. |
| 19 | K-FUNC1 | I | "FUNCTION" key input. |
| 20 | K-FUNC2 | I | "FUNCTION" key input. |
| 21 | K-RMC | I | Wire remote control input. |
| 22 | VDIN | I | Battery voltage monitoring input. |
| 23 | SWR/H | I | Resume/Hold switch input. |
| 24 | CHRGIN | I | Charge voltage monitoring input. |
| 25 | DEST | I | Tuner band setting. |
| 26 | VREF– | – | Connected to GND. |
| 27 | VDD | – | Connected to VDD. |
| 28 | MDATA | O | DSP MDATA output. |
| 29 | STAT | I | DSP STAT input. |
| 30 | MCLK | O | DSP MCLK output. |
| 31 | DO | O | PLL and EEPROM data output. |
| 32 | DI | I | PLL and EEPROM data input. |
| 33 | CLK | O | PLL and EEPROM clock output. |
| 34 | BEEP | O | Buzzer output for headphone. |
| 35 | NRST | O | DSP reset output. |
| 36 | $\overline{\text{MLD}}$ | O | DSP MLD output. |
| 37 | DSL-ON | O | Headphone DSL control output. "L": DSL on. |
| 38 | BOOST | O | Current control. "L": STOP mode. |
| 39 | PLL CE | O | PLL chip enable output. |
| 40 | EEP CE | O | EEPROM chip enable output. |
| 41 | BLKCK | I | DSP BLKCK input. |



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| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 42 | WAKEUP | I | Wake up key input. |
| 43 | SWIL | I | Limited switch input. |
| 44 | VDD | – | Connected to VDD. |
| 45 | CDRW | O | CD-RW play gain level selection output. Off at "L". |
| 46 | $\overline{\text{PU-ON}}$ | O | H/A power down output. "H": Power down. |
| 47 | $\overline{\text{EASS–ON}}$ | O | EASS gain up selection output. "L": EASS on. |
| 48 | MUTE | O | Audio mute output. |
| 49 | STANDBY | O | Headphone standby output. Standby at "L". |
| 50 | P-OFF | O | Voltage mode select. |
| 51 | P-ON | O | Power IC power on output. Power on at "L". |
| 52 | SWCL | I | Cover open/close detection switch input. |
| 53 | VE-MODE | I | Continuously 2 times spindle speed mode. (Connected to GND) |
| 54 | SP-2/3 | I | Enter test mode at "L". |
| 55 | DRAM | I | Not used. |
| 56 | ACIN | I | AC adaptor detection. |
| 57 | AUTO | I | Not used. |
| 58 | SPCON | O | Spindle PWM control output. (Connected to GND) |
| 59 | NC | O | Not connected. |
| 60 | SEG17 | O | LCD segment output. |
| 61 | SEG16 | O | LCD segment output. |
| 62 | SEG15 | O | LCD segment output. |
| 63 | SEG14 | O | LCD segment output. |
| 64 | SEG13 | O | LCD segment output. |
| 65 | SEG12 | O | LCD segment output. |
| 66 | SEG11 | O | LCD segment output. |
| 67 | SEG10 | O | LCD segment output. |
| 68 | SEG09 | O | LCD segment output. |
| 69 | SEG08 | O | LCD segment output. |
| 70 | SEG07 | O | LCD segment output. |
| 71 | SEG06 | O | LCD segment output. |
| 72 | SEG05 | O | LCD segment output. |
| 73 | SEG04 | O | LCD segment output. |
| 74 | SEG03 | O | LCD segment output. |
| 75 | SEG02 | O | LCD segment output. |
| 76 | SEG01 | O | LCD segment output. |
| 77 | COM04 | O | LCD common output. |
| 78 | COM03 | O | LCD common output. |
| 79 | COM02 | O | LCD common output. |
| 80 | COM01 | O | LCD common output. |

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| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | DRVDD | I | DRAM interface power (terminal No. 2 to 19). |
| 2 | D0 | I/O | DRAM data input/output signal 0. |
| 3 | D1 | I/O | DRAM data input/output signal 1. |
| 4 | NWE | O | DRAM write enable signal. |
| 5 | NRAS | O | DRAM RAS control signal. |
| 6 | D2 | I/O | DRAM data input/output signal 2. |
| 7 | D3 | I/O | DRAM data input/output signal 3. |
| 8 | NCAS0 | O | DRAM CAS control signal 0. |
| 9 | A10 | O | DRAM address signal 10. |
| 10 | A8 | O | DRAM address signal 8. |
| 11 | A7 | O | DRAM address signal 7. |
| 12 | A6 | O | DRAM address signal 6. |
| 13 | A5 | O | DRAM address signal 5. |
| 14 | A4 | O | DRAM address signal 4. |
| 15 | A9 | O | DRAM address signal 9. |
| 16 | A0 | O | DRAM address signal 0. |
| 17 | A1 | O | DRAM address signal 1. |
| 18 | A2 | O | DRAM address signal 2. |
| 19 | A3 | O | DRAM address signal 3. |
| 20 | DVSS2 | I | Digital circuit GND. |
| 21 | DVDD2 | I | Digital circuit power. |
| 22 | SPOUT | O | Spindle motor driver signal output. |
| 23 | TRVP | O | Traverse drive output (– polar output). |
| 24 | TRVM | O | Traverse drive output (+ polar output). |
| 25 | TRP | O | Tracking drive output (– polar output). |
| 26 | TRM | O | Tracking drive output (+ polar output). |
| 27 | FOP | O | Focus drive output (– polar output). |
| 28 | FOM | O | Focus drive output (+ polar output). |
| 29 | IOVDD1 | I | I/O power supply. |
| 30 | TBAL | O | Tracking balance adjustment output. |
| 31 | FBAL | O | Focus balance adjustment output. |
| 32 | FE | I | Focus error signal input (analogue input). |
| 33 | TE | I | Tracking error signal input (analogue input). |
| 34 | RFENV | I | RF envelope signal input (analogue input). |
| 35 | OFT | I | Off track signal input. "H": Off track. |
| 36 | NRFDET | I | RF detection signal input. "L": Detected. |
| 37 | BDO | I | Drop out signal input. "H": Drop out. |
| 38 | LDON | O | Laser on signal output. "H": On. (Not used) |
| 39 | ARF | I | RF signal input. |
| 40 | IREF | I | Reference current input terminal. |
| 41 | ADPVCC | I | A/D reference voltage input (analogue input). |



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| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 42 | DSLF | O | DSL loop filter terminal. |
| 43 | DRF | O | Bias terminal for DSL. |
| 44 | PLLF | O | PLL loop filter terminal. |
| 45 | VCOF | O | Jitter free VCO loop filter terminal. |
| 46 | AVDD2 | I | Analogue circuit power (for DSL, PLL, VCOF, AD, DA). |
| 47 | AVSS2 | I | Analogue circuit GND (for DSL, PLL, VCOF, AD, DA). |
| 48 | OUTL | O | Lch audio output. |
| 49 | AVSS1 | I | Analogue circuit GND. |
| 50 | OUTR | O | Rch audio output. |
| 51 | AVDD1 | I | Analogue circuit power. |
| 52 | FSEL | I | Noise filter on/off switch input. "L": On, "H": Off. (Connected to VDD) |
| 53 | TMOD1 | I | Terminal mode switch input terminal 1. Normally set to "L". (Connected to GND) |
| 54 | TMOD2 | I | Terminal mode switch input terminal 2. Normally set to "L". (Connected to GND) |
| 55 | FLAG | O | Flag signal output. (Not used) |
| 56 | IPFLAG | O | Interpolation flag signal output. "H": Interpolation. (Not used) |
| 57 | EXT0 | I/O | Extension input/output port 0. (Not used) |
| 58 | EXT1 | I/O | Extension input/output port 1. (Not used) |
| 59 | IOVDD2 | I | I/O power supply. |
| 60 | TX | O | Digital audio interface output signal. (Not used) |
| 61 | MCLK | I | Microcomputer command clock signal input. (Data is latched at loading edge) |
| 62 | MDATA | I | Microcomputer command data signal input. |
| 63 | MLD | I | Microcomputer command load signal input. "L": Load. |
| 64 | BLKCK | O | Sub-code block clock signal fBLKCK = 75Hz. (In normal PLAY mode) |
| 65 | PWMSEL | I/O | PWM output mode select input. (Connected to GND) |
| 66 | SMCK | O | 4.236MHz/8.4672MHz clock signal output. (Not used) |
| 67 | DMUTE | I | Muting input. "H": Mute. (Connected to GND) |
| 68 | STAT | O | Status signal output. |
| 69 | NRST | I | Reset input. "L": Reset. |
| 70 | SPPOL | O | Spindle motor drive signal output. (Polar output) |
| 71 | PMCK | O | 88.2kHz clock signal output. (Not used) |
| 72 | NCLDCK | O | Sub-code frame clock signal output = 7.35kHz ( In normal PLAY mode ) (Not used) |
| 73 | SUBC | O | Sub-code serial output. (Not used) |
| 74 | SBCK | O | Clock input for sub-code serial output. (Connected to GND) |
| 75 | NTEST | I | Test terminal, normally set to “H”. (Connected to VDD) |
| 76 | X2 | O | Quartz oscillator circuit output terminal f = 16.93MHz. |
| 77 | X1 | I | Quartz oscillator circuit input terminal f = 16.93MHz. |
| 78 | VDSS1 | I | Digital circuit GND. |
| 79 | DVDD1 | I | Digital circuit power. |
| 80 | EXT2 | I/O | Extension input/output port 2. (Not Used) |

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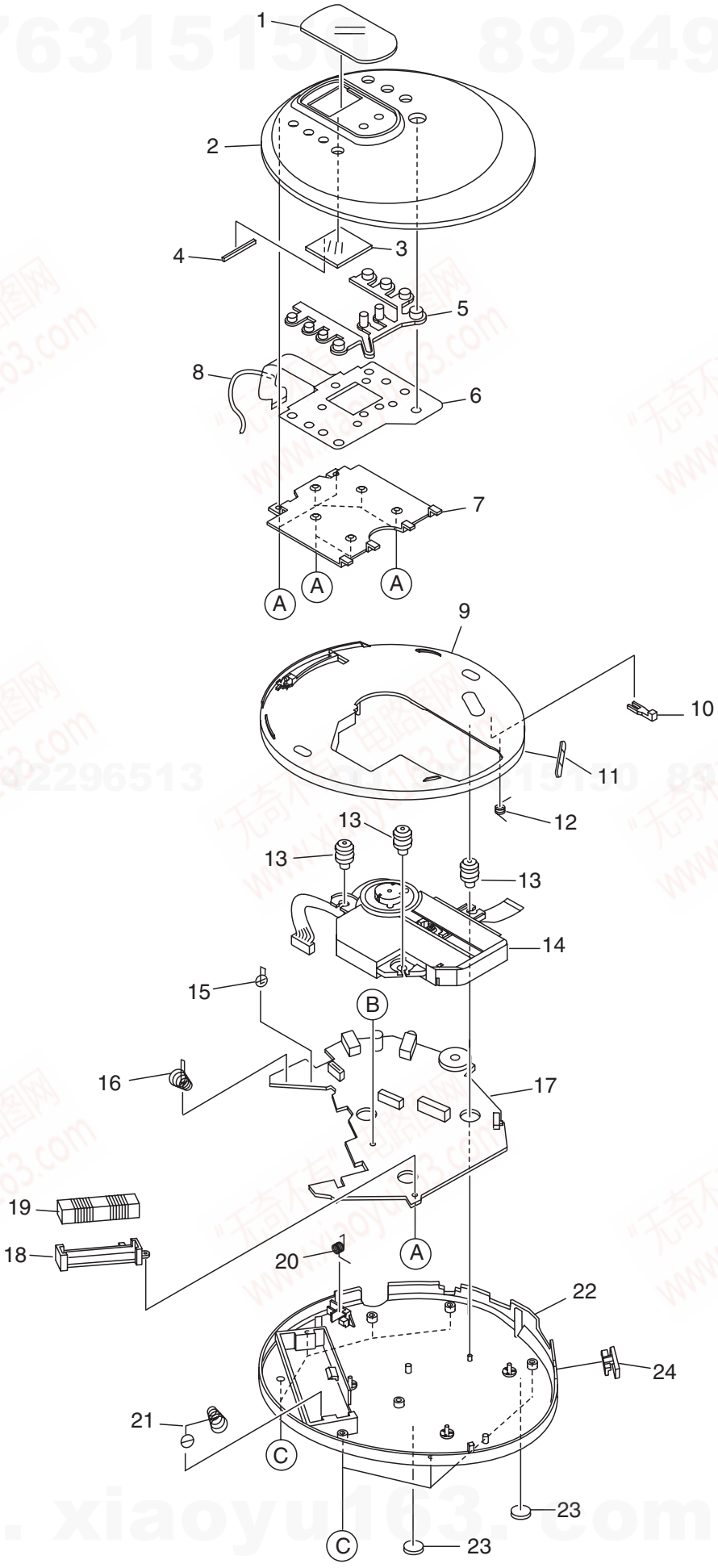
MECHANICAL EXPLODED VIEW



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# MECHANICAL PARTS LIST

! = ⚠ SAFTY PARTS
C = Components marked
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| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| PLATE | | O | MC1001 | 8C-HC5-006-010 | WINDOW,DISPLAY | a | b |
| APPEARANCE | | O | MC1002 | 8C-HC5-033-010 | LID,CD R232 (ST) | a | . |
| APPEARANCE | | O | MC1002 | 8C-HC5-043-010 | LID,CD R238 (ST) | . | b |
| KEY | | O | MC1003 | 8C-HC5-620-010 | LCD,CHC-5 REFLEX | a | b |
| OTHERS | | O | MC1004 | 8C-HC5-206-010 | JOINT,LCD CHC-5 | a | b |
| KNOB | | O | MC1005 | 8C-HC5-008-010 | KEY,PLAY | a | b |
| PWB | | O | MC1006 | 8C-HC5-601-010 | PWB,FLEX CHC-5 | a | b |
| PLATE | | O | MC1007 | 8C-HC5-007-010 | HLDR,LID CD | a | b |
| OTHERS | | X | MC1008 | 87-601-052-210 | WIRE,P1-5-2 | a | b |
| APPEARANCE | | O | MC1009 | 8C-HC5-035-010 | CABI,CENTER (ST) | a | b |
| OTHERS | | O | MC1010 | 8C-HC5-041-010 | PLATE,SW (ST) | a | b |
| KNOB | | O | MC1011 | 8C-HC5-039-010 | KNOB,SL OPEN (ST) | a | b |
| OTHERS | | O | MC1012 | 8C-HC5-205-010 | SPR-T,KNOB SL OPEN | a | b |
| OTHERS | | O | MC1013 | 8C-HC7-215-010 | DMPR,MECHA 40 | a | b |
| DISC TRANSPORT | | O | MC1014 | M8-CZK-190-070 | KSM-780ATA | a | b |
| OTHERS | | O | MC1015 | 8C-HC5-201-010 | BAT-CONTACT,(+) | a | b |
| OTHERS | | O | MC1016 | 8C-HC5-202-010 | BAT-CONTACT,(-) | a | b |
| PWB | | X | MC1017 | 8C-HC5-600-010 | PWB,MAIN CHC-5 | a | b |
| OTHERS | | X | MC1018 | 8C-HC5-208-010 | HLDR,ANT | a | b |
| TUNER(COM) | | O | MC1019 | 8C-HC5-625-010 | ANT,BAR-ANTENNA CHC-5 | a | b |
| OTHERS | | O | MC1020 | 8C-HC5-204-010 | SPR-T,OPEN | a | b |
| OTHERS | | O | MC1021 | 8C-HC5-203-010 | BAT-CONTACT,(+)(-) | a | b |
| APPEARANCE | | O | MC1022 | 8C-HC5-036-010 | CABI ASSY,BOTTOM (ST) | a | b |
| APPEARANCE | | X | MC1022a | 8C-HC5-037-010 | CABI,BOTTOM (ST) | a | b |
| APPEARANCE | | X | MC1022b | 8C-HC5-038-010 | LID,BAT (ST) | a | b |
| APPEARANCE | | O | MC1023 | 8Z-HC4-027-010 | FOOT,DIA10 | a | b |
| KNOB | | O | MC1024 | 8C-HC5-040-010 | KNOB,SL HOLD (ST) | a | b |
| SCREW | | O | MC1A | 87-067-732-010 | VT2+1.4-3 CR BLK HL | a | b |
| SCREW | | O | MC1B | 87-067-868-010 | V+1.7-4 BLK HL | a | b |
| SCREW | | O | MC1C | 87-067-869-010 | V+1.7-8 SWCH/ZN BLK HL | a | b |



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## COLOR NAME TABLE

| Basic color symbol | Color | Basic color symbol | Color | Basic color symbol | Color |
|---|---|---|---|---|---|
| B | Black | C | Cream | D | Orange |
| G | Green | H | Gray | L | Blue |
| LT | Transparent Blue | N | Gold | P | Pink |
| R | Red | S | Silver | ST | Titan Silver |
| T | Brown | V | Violet | W | White |
| WT | Transparent White | Y | Yellow | YT | Transparent Yellow |
| LM | Metallic Blue | LL | Light Blue | GT | Transparent Green |
| LD | Dark Blue | DT | Transparent Orange | GM | Metallic Green |
| YM | Metallic Yellow | DM | Metallic Orange | PT | Transparent Pink |
| LA | Aqua Blue | GL | Light Green | HT | Transparent Gray |
| HM | Metallic Gray | NH | Champagne Gold | M | Wood Pattern |



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# ACCESSORIES PARTS LIST

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| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| PRINTED DU | | O | 1 | 8C-HC5-910-010 | IB,YUC(E)C R232 | a | . |
| PRINTED DU | | O | 1 | 8C-HC5-930-010 | IB,YUC(F)C R232 | a | . |
| PRINTED DU | | O | 1 | 8C-HC5-920-010 | IB,YUC(S)C R232 | a | . |
| PRINTED DU | | O | 1 | 8C-HC5-931-010 | IB,AC(E)C R238 | . | b |
| PRINTED DU | | O | 1 | 8C-HC5-941-010 | IB,AC(F)C R238 | . | b |
| ACCESSORY | | O | 2 | 87-B30-556-010 | HEADPHONE,HP-M046 R | a | b |
| ACCESSORY | ! | O | 3 | 87-B30-508-010 | AC ADAPTOR,AC-D603UCNC | . | b |



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# OTHER PARTS LIST

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| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| LBL,POP | | X | | 8C-HC5-976-010 | LBL,POP 232YU | a | b |
| OTHERS | | X | | 8C-HC5-207-010 | SH,ADH WINDOW | a | b |
| OTHERS | | X | | 8C-HC5-213-010 | SH,FPC 2 | a | b |
| OTHERS | | X | | 8C-HC5-209-010 | SH,LCD | a | b |
| OTHERS | | X | | 8C-HC5-212-010 | SH,SHILD FPC | a | b |
| PACKING | | X | | 8C-HC5-856-010 | PAD,B | a | b |
| PACKING | | X | | 8C-HC5-855-010 | PAD,A | a | b |
| PACKING | | X | | 8C-HC5-852-010 | COVER,BTM 230 YUCBSC | a | b |
| PACKING | | X | | 8C-HC5-851-010 | COVER,TOP 230 YUCBSC | a | b |
| PACKING | | X | | 8C-HC5-854-010 | BD,PRINTED 232 YUCBSC | a | . |
| PACKING | | X | | 8C-HC5-858-010 | CTN,OUTER 232 YUCBSTC | a | . |
| PACKING | | X | | 87-056-887-010 | LBL,COLOR M T-SIL | a | . |
| PACKING | | X | | 87-B40-486-010 | LBL,COLOR M T-SIL (FRENCH) | a | . |
| PACKING | | X | | 8C-HC5-874-010 | BD,PRINTED 238 ACB2STC | . | b |
| PACKING | | X | | 8C-HC5-875-010 | CTN,OUTER 238 ACB2STC | . | b |
| PLATE | | X | | 84-711-909-010 | LBL DATE CODE | a | b |
| PLATE | | X | | 87-B40-282-010 | LBL,BAR-CODE AU 35X8 | a | b |
| PLATE | | X | | 87-B40-154-010 | LBL,BAR-CODE CU | a | b |
| PLATE | | X | | 8C-HC5-019-010 | LBL,SPEC YUC R232 | a | . |
| PLATE | | X | | 8C-HC5-025-010 | LBL,SPEC AUC R238 | . | b |

| UNIT-NAME | ! | C | REF-NO | PARTS-NO | PARTS-NAME | SUFFIX&MODEL XP-R232 YUCBSTC | XP-R238 ACB2STC |
|---|---|---|---|---|---|---|---|
| PLATE | | X | | 8Z-HC4-209-010 | TAG,SENSOR AM | . | b |
| PRINTED DU | | X | | 87-B50-098-010 | WARR-CARD,C(E) POR-0104 | a | b |
| PRINTED DU | | X | | 87-B50-099-010 | WARR-CARD,C(F) POR-0104 | a | b |
| PRINTED DU | | X | | 87-056-146-010 | SH,CAUTION HP-N | a | . |
| PRINTED DU | | X | | 87-B50-054-010 | WARR-CARD,USA CUST/PORTABLE | a | . |



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